Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Dr. Henry I. Bowditch alluded to a case of aortic aneurism in which he had, with the assistance of Drs. J. C. Warren and J. J. Putnam, used electricity for the treatment of this usually fatal disease.

The patient, an adult man, had a pulsation distinctly felt in the second right intercostal space, which last, with the parts adjacent, was slightly prominent, but not effaced. The respiratory murmur was free throughout both lungs, save in this part, and there it was bronchial to the extent of two or three inches; dull percussion in the same. Two operations have been made, namely, on November 12 and 17, 1872. Three needles coated with vulcanite were used at each operation. They were introduced about an inch at the first, and from an inch and a quarter to an inch and a half at the second operation. They evidently were introduced into a freely moving current at the first, as seen by the widely moving needle-ends, but into a more solid mass at the second. The positive pole of the battery *alone* was applied to them, the negative resting on the right breast on a level with the tumor. The number of cells used (Stöhrer's battery) were gradually raised from two up to sixteen at the first, and to twenty-eight at the second. The operations lasted fourteen and a half and fourteen minutes. A little faintness and pulselessness were noticed at the termination of each. They soon passed away. The result of the two operations has been a great solidity of the tumor, with considerable swelling of parts adjacent, which swelling is now (November 26) subsiding. No superficial redness or sloughing of the skin occurred. No air appeared in the tumor, as noticed often in Europe, where needles attached to *both* poles are usually introduced (*Vid. Ciniselli Annali di Medicina*, November, 1870; *Frazer's Edinburgh Medical and Surgical Journal*, August, 1867). The patient has not suffered at all from the operations. It is impossible, as yet, to say what influence they will have towards his radical cure. But he is more comfortable than before the first operation.

Six hundred and fifty-first Meeting.

December 10, 1872. — MONTHLY MEETING.

The PRESIDENT in the chair.

The Corresponding Secretary read letters from Professor

Nicholas St. John Green, and from Professor William Ripley Nichols, acknowledging their election into the Academy.

It was voted to grant the use of the Hall of the Academy on the morning of Thursday, December 12, to the Massachusetts Historical Society.

The President called the attention of the Academy to a volume richly illustrated, entitled "Revision of the Echini," by Alexander Agassiz.

Alexander Agassiz then exhibited specimens of the Albertype and Woodburytype methods of photo-engraving employed in illustrating his work.

The Recording Secretary exhibited a new form of Theodolite-Magnetometer.

A letter was then read from Dr. Robert Amory, describing some specimens of objects exposed to the fire of November 9, which led to a discussion in which most of the members present participated.

Six hundred and fifty-second Meeting.

January 14, 1873. — MONTHLY MEETING.

The CORRESPONDING SECRETARY in the chair.

The Corresponding Secretary read a letter from Professor Döllen, of Pulkowa, acknowledging his election, as Foreign Honorary Member, into the Academy.

Professor J. M. Peirce read the following paper by Professor J. M. Rice of Annapolis, and Professor W. W. Johnson of St. John's College, Maryland, "On a New Method of obtaining the Differentials of Functions, with especial reference to the Newtonian Conception of Rates or Velocities."

The fundamental conceptions which have been employed in the development of the elementary theorems of the Differential Calculus are four in number, namely, that of *Infinitesimal Differences*, that of *Limits*, that of *Derived Functions*, and that of *Rates* or *Fluxions*.

While the first and more recently the second have received greater attention and more systematic development, the last, the Conception of Rates, has an important advantage in the readiness with which its